

Amendments to the Claims:

This Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-19 (canceled).

20. (new) A computer system having an input/output processing unit for executing a file access, an access execution unit for requesting a file access via the input/output processing unit in response to a user instruction, and an access control unit for performing access control when the file access is executed, wherein the access control unit comprises:

- a storage unit protected from the access execution unit;
- a file list stored in the storage unit describing security levels of files;
- a user list stored in the storage unit describing clearances of users;
- an access control processing unit for determining whether the file access is legal in accordance with the file list, the user list, an access type of the file access, information identifying a file, and information identifying a user;
- an enciphering unit for encrypting a file when storing the file on a storage medium;
- a deciphering unit for decrypting the encrypted file when retrieving the encrypted file from the storage medium; wherein the storage unit stores at least one key created independently of the user, which key is used for both encrypting and decrypting; and
- an access monitor unit which:
 - when the input/output processing unit executes a file access, sends the access type, the information identifying the file, and the information identifying the user to the access control processing unit;
 - receives a validity determination result of the file access from the access control processing unit; and
 - if the file access is legal, causes the input/output processing unit to execute the file access, and if the file access is illegal, inhibits the file access.

21. (new) A system as in claim 20 further comprising an exclusive control unit for protecting, from the access execution unit, a storage area of the storage unit to be used by the access control processing unit.

22. (new) A system as in claim 21 further comprising a user list setting/managing unit for setting and managing the user list.

23. (new) A system as in claim 22 wherein the user list setting/managing unit includes an authentication unit for authenticating a security administrator.

24. (new) A system as in claim 23 wherein the security administrator is different from a system administrator who manages the access execution unit.

25. (new) A system as in claim 20 further comprising a file list setting/managing unit for setting and managing the file list.

26. (new) A system as in claim 25 wherein the file list setting/managing unit includes an authentication unit for authenticating a security administrator.

27. (new) A system as in claim 26 wherein the security administrator is different from a system administrator who manages the access execution unit.

28. (new) A system as in claim 20 further comprising:
an enciphering unit for encrypting a file if the file access requesting to output a file to the storage unit is legal; and
a deciphering unit for decrypting the enciphered file if the file access for requesting to input the enciphered file from the storage unit is legal.

29. (new) A system as in claim 28 wherein an exclusive control unit protects from the access execution unit a storage area in the storage unit storing at least one key information set to be used by the enciphering unit and the deciphering unit.

30. (new) A system as in claim 20 wherein the enciphering unit and the deciphering unit use a plurality set of different key information and at least one cipher method for each security level written in the file list.

31. (new) A system as in claim 20 further comprising an input/output monitor unit for monitoring that the input/output processing unit or the access monitor unit is not tampered or performs a predetermined operation, and instructing to inhibit an input/output of a file if the input/output processing unit or the access monitor unit is tampered or performs an operation different from the predetermined operation.

32. (new) A system as in claim 20 further comprising a file access log processing unit for storing and managing information on each file access sent to the access control processing unit.

33. (new) A system as in claim 20 wherein the access control unit is realized by a software module.

34. (new) A system as in claim 20 wherein the access control unit is realized by a hardware module.

35. (new) A system as in claim 20 wherein the key comprises a symmetric key.